

What is claimed is:

1. An electronic portable appliance, comprising:
 a power feed means for supplying electric power;
 a power storing means for storing electric power of the power
 feed means;

a drive circuit to be driven on one of electric power of the
 power feed means and electric power stored on the power storing
 means;

a switch means provided on a charging path to charge power
 of the power feed means to the power storing means;

a control circuit provided to compare voltages on a charging
 path at forward and rear points of the switch means;

wherein the control circuit turns on the switch means to
 charge electric power of the power feed means to the power storing
 means when detecting higher is a voltage on the charging path at
 the forward point of the switch means, and turns off the switch
 means to prevent storage power from reversely flowing from the
 power storing means to the power feed means when detecting lower
 is a voltage on the charging path at the forward point of the switch
 means.

2. An electronic portable appliance, comprising:
 a power feed means for supplying electric power;
 a power storing means for storing electric power of the power
 feed means;

a drive circuit to be driven on one of electric power of the
 power feed means and electric power stored on the power storing

means;

a resistance element provided in series on a charging path to charge electric power of the power feed means to the power storing means;

a switch means provided on the charging path;

a control circuit provided to compare voltages on the charging path at forward and rear points of the resistor element and the switch means;

wherein the control circuit turns on the switch means to charge electric power of the power feed means to the power storing means when detecting higher is a voltage on the charging path at the forward point of the resistor element and the switch means, and turns off the switch means to prevent storage power from reversely flowing from the power storing means to the power feed means when detecting lower is a voltage on the charging path at the forward point of the resistance element and the switch means.

3. An electronic portable appliance, comprising:

a power feed means for supplying electric power;

a power storing means for storing electric power of the power feed means;

a drive circuit to be driven on one of electric power of the power feed means and electric power stored on the power storing means;

a diode element provided in a forward charging direction on a charging path to charge power of the power feed means to the power storing means;

a switch means provided in series with the diode element on a charging path;

a control circuit provided to compare voltages on a charging path at forward and rear points of the diode element and the switch means;

wherein the control circuit turns on the switch means to charge electric power of the power feed means to the power storing means when detecting higher is a voltage on the charging path at the forward point of the diode element and the switch means, and turns off the switch means to prevent storage power from reversely flowing from the power storing means to the power feed means when detecting lower is a voltage on the charging path at the forward point of the diode element and the switch means.

4. An electronic portable appliance, comprising:

a power feed means for supplying electric power;

a power storing means for storing electric power of the power feed means;

a drive circuit to be driven on one of electric power of the power feed means and electric power stored on the power storing means;

a diode element provided in a forward charging direction on charging path to charge power of the power feed means to the power storing means;

a resistor element provided in parallel with the diode element on the charging path;

a switch means provided in series with at least one of the

diode element and the resistor element on a charging path;

a control circuit provided to compare voltages on a charging path at forward and rear points of the diode element and the resistor element connected in parallel with each other and the switch means;

wherein the control circuit turns on the switch means to charge electric power of the power feed means to the power storing means when detecting higher is a voltage on the charging path at the forward point of the diode element and the resistor element connected in parallel with each other and the switch means, and turns off the switch means to prevent storage power from reversely flowing from the power storing means to the power feed means when detecting lower is a voltage on the charging path at the forward point of the diode means and the resistor element connected in parallel with each other and the switch means.

5. An electronic portable appliance according to claim 1, wherein the switch means is configured by a MOS transistor.

6. An electronic portable appliance according to claim 1, wherein the control circuit has a voltage comparator circuit to operate intermittently and a memory circuit to memorize a result of comparison by the voltage comparator circuit in operation each time the voltage comparator circuit operates and output the memorized comparison result as a control signal for the switch means.

7. An electronic portable appliance according to claim 6, wherein the drive circuit has an oscillation circuit or an

oscillation circuit and frequency dividing circuit, whereby an intermittent pulse is created based on an output signal of one of the oscillation circuit and the frequency dividing circuit to cause the voltage comparator circuit to intermittently operate.

8. An electronic portable appliance according to claim 6, wherein the power feed means has a booster circuit to increase an electromotive force voltage of a power generating means by utilizing output signals of the power generating means and the oscillation circuit, whereby an intermittent pulse is created based on an output signal of the oscillation circuit to cause the voltage comparator circuit of the control circuit to intermittently operate.

505
481
9. An electronic portable appliance, comprising
a power feed means for supplying electric power, a power storing means for storing electric power of the power feed means, a drive circuit to be driven on at least one of electric power of the power feed means and electric power stored on the power storing means, a switch means provided between the power feed means and the power storing means, and a control circuit for comparing between a voltage of the switch means on a side of the power feed means and a voltage thereof on a side of the power storing means;
wherein the control circuit turns on the switch means when the voltage of the switch means on the power feed means side is higher and turns off the switch means when the voltage of the switch means on the power feed means side is lower.

10. An electronic portable appliance according to claim 9,

Sub
A21 Cont

further comprising a resistor element provided between the switch means and the power storing means, and the control circuit turning on the switch means when the voltage of the resistor element on the power feed means side is higher and turning off the switch means when the voltage of the switch means on the power storing means side is higher.

11. An electronic portable appliance according to claim 9, further comprising a diode element provided in a forward charging direction between the switch means and the power storing means, and the control circuit turning on the switch means when the voltage of the diode element on the power feed means side is higher and turning off the switch means when the voltage of the switch means on the power storing means side is higher.

12. An electronic portable appliance according to claim 11, further comprising a resistor element connected in parallel with the diode element.

13. An electronic portable appliance according to claim 9, wherein the switch means has a MOS transistor.

14. An electronic portable appliance according to claim 9, wherein the control circuit has a voltage comparator circuit to operate intermittently and a memory circuit to memorize a result of comparison by the voltage comparator circuit in operation each time the voltage comparator circuit operates and output the memorized comparison result as a control signal for the switch means.

15. An electronic portable appliance according to claim 14,

wherein the drive circuit has at least one of an oscillation circuit and a frequency dividing circuit, whereby an intermittent pulse is created based on an output signal at least one of the oscillation circuit and the frequency dividing circuit to cause the voltage comparator circuit to intermittently operate.

16. An electronic portable appliance according to claim 14, wherein the power feed means has a booster circuit to increase an electromotive force voltage of a power generating means by utilizing output signals of the power generating means and the oscillation circuit, whereby an intermittent pulse is created based on an output signal of the oscillator circuit to cause the voltage comparator circuit of the control circuit to intermittently operate.

17. An electronic portable appliance according to claim 2, wherein the control circuit has a voltage comparator circuit to operate intermittently and a memory circuit to memorize a result of comparison by the voltage comparator circuit in operation each time the voltage comparator circuit operates and output the memorized comparison result as a control signal for the switch means.

18. An electronic portable appliance according to claim 3, wherein the control circuit has a voltage comparator circuit to operate intermittently and a memory circuit to memorize a result of comparison by the voltage comparator circuit in operation each time the voltage comparator circuit operates and output the memorized comparison result as a control signal for the switch

means.

19. An electronic portable appliance according to claim 4, wherein the control circuit has a voltage comparator circuit to operate intermittently and a memory circuit to memorize a result of comparison by the voltage comparator circuit in operation each time the voltage comparator circuit operates and output the memorized comparison result as a control signal for the switch means.

20. An electronic portable appliance according to claim 17, wherein the drive circuit has an oscillation circuit, whereby an intermittent pulse is created based on an output signal of the oscillation circuit to cause the voltage comparator circuit to intermittently operate.